

OPTIMIZING NUTRITION FOR SUSTAINED ENERGY, PART I

Maintaining high energy levels is crucial for keeping up with our daily activities. Our bodies convert the calories from foods and beverages we consume into fuel that powers us through the day. The recommended daily calorie intake for adults ranges from 1500-2500 calories per day, depending on age, sex, and activity level.¹



Eating a balanced diet comprised of the right nutrients can help provide caloric energy within the recommended range for sustained energy levels. In contrast, poor nutrition can lead to energy crashes, sluggishness, and an increased risk of fatigue-related health issues over time.

Optimizing nutrition for sustained energy comes down to consuming a balanced diet at good timing consisted of good macro- and micronutrients and adequate hydration that provides essential nutrients without weighing you down.

Key Nutrition Principles to Optimize Energy Levels

1. Balance Your Plate

- ➤ Include protein, complex carbohydrates, and healthy fats in each meal and choice of snacks.²
- ➤ Balanced nutrients help slow digestion and provide steady fuel.³

2. Choose Complex Carbohydrates

- Favor whole grains (e.g. oats, quinoa), fruits, and vegetables, rather than simple sugars.⁴
- ➤ Complex carbohydrates release energy more slowly, helping to maintain stable blood sugar.⁵

3. Hydration^{2,3}

- ➤ Dehydration can sap energy. Drinking water throughout the day to ensure adequate hydration.
- Eat water-rich foods (e.g. fruits, vegetables) to enhance hydration.

4. Limit "Energy Zappers"²

- Avoid or reduce added sugars (e.g. sodas, energy drinks). Added sugars may give a quick boost but often lead to an energy crash.
- ➤ While caffeine enhances endurance and focus, be cautious about relying too much on caffeine long-term for energy boost.^{6,7}

5. Micronutrients Matter⁸

- > Key vitamins & minerals support energy production:
 - **B-vitamins** (e.g. B6, B12, folate) are critical for metabolism.
 - **Iron** helps in oxygen transport low iron = fatigue.
 - Magnesium and calcium help with nerve signaling and muscle function.
- Consume foods rich in antioxidants (e.g. fruits, vegetables) to reduce inflammation and improve cellular energy.

6. Smart Timing (Nutrient Timing)

- Eat regularly (every 3–4 hours or small "mini-meals") to avoid hunger and blood sugar dips and to help distribute nutrients throughout the day for sustained stable energy.⁹
- ➤ If you exercise: having carbs + some protein **before** and **after** exercise helps maintain and recover energy stores.⁴

7. Avoid Poor Dietary Habits

- Skipping meals, eating too little, or relying on heavily processed convenience foods can lead to energy deficits.¹⁰
- ➤ Overeating can also negatively impact energy levels by diverting blood flow from the brain to the digestive system after large meals.¹¹

Other Supports for Energy (Beyond Nutrition)

- Ensure sufficient **sleep** nutrition helps, but sleep is foundational.
- Manage stress high stress can sap energy regardless of nutrients intake.
- Include **physical activity** regular, moderate physical activity improves metabolism and energy efficiency.

CITATIONS

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